PCIM DISPLAY

- System chart
- NSWC responsibilities
- SPCO
- CPES/MAXWELL
- Notes
- DC distribution

Vector Research POC

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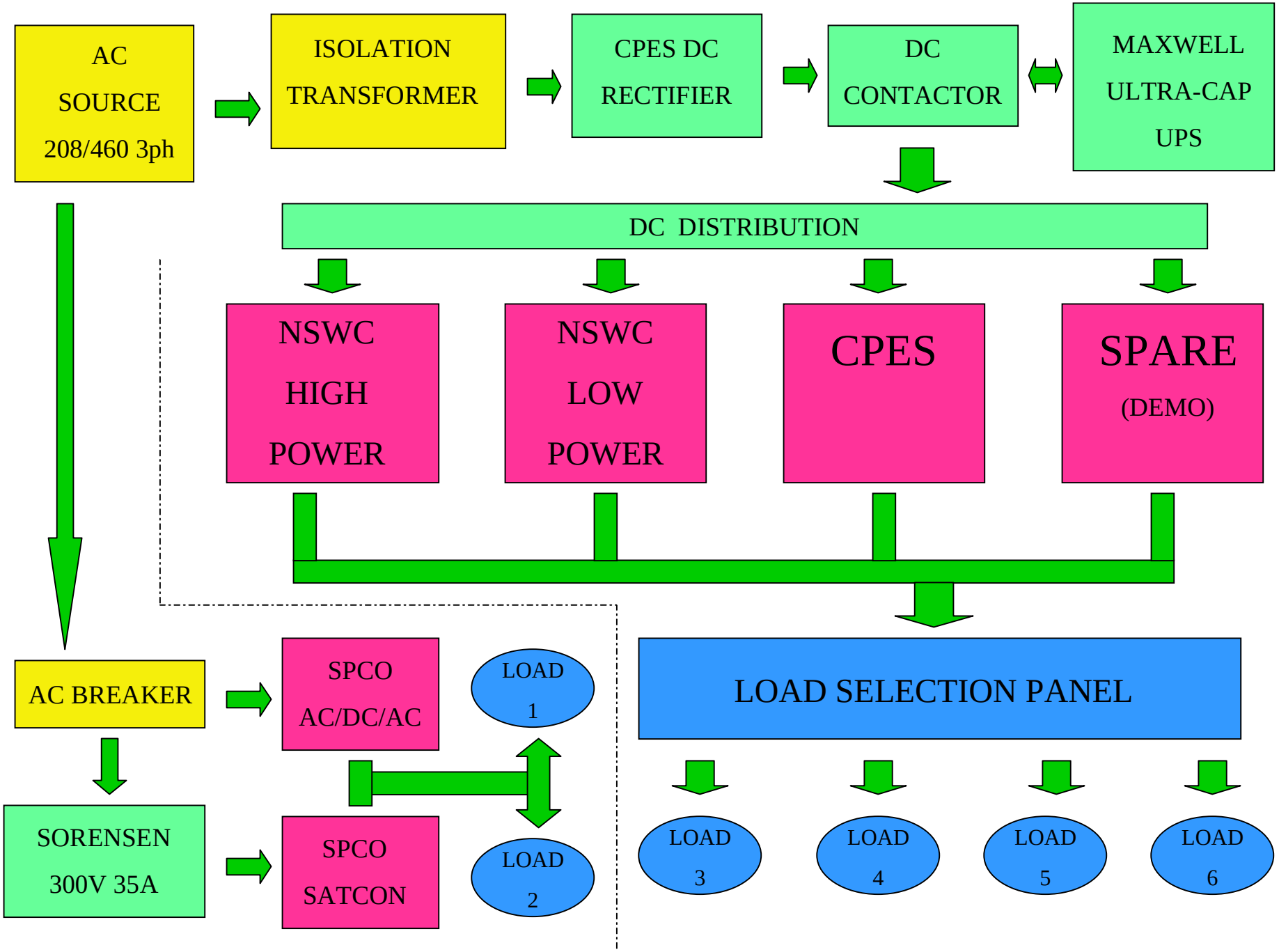
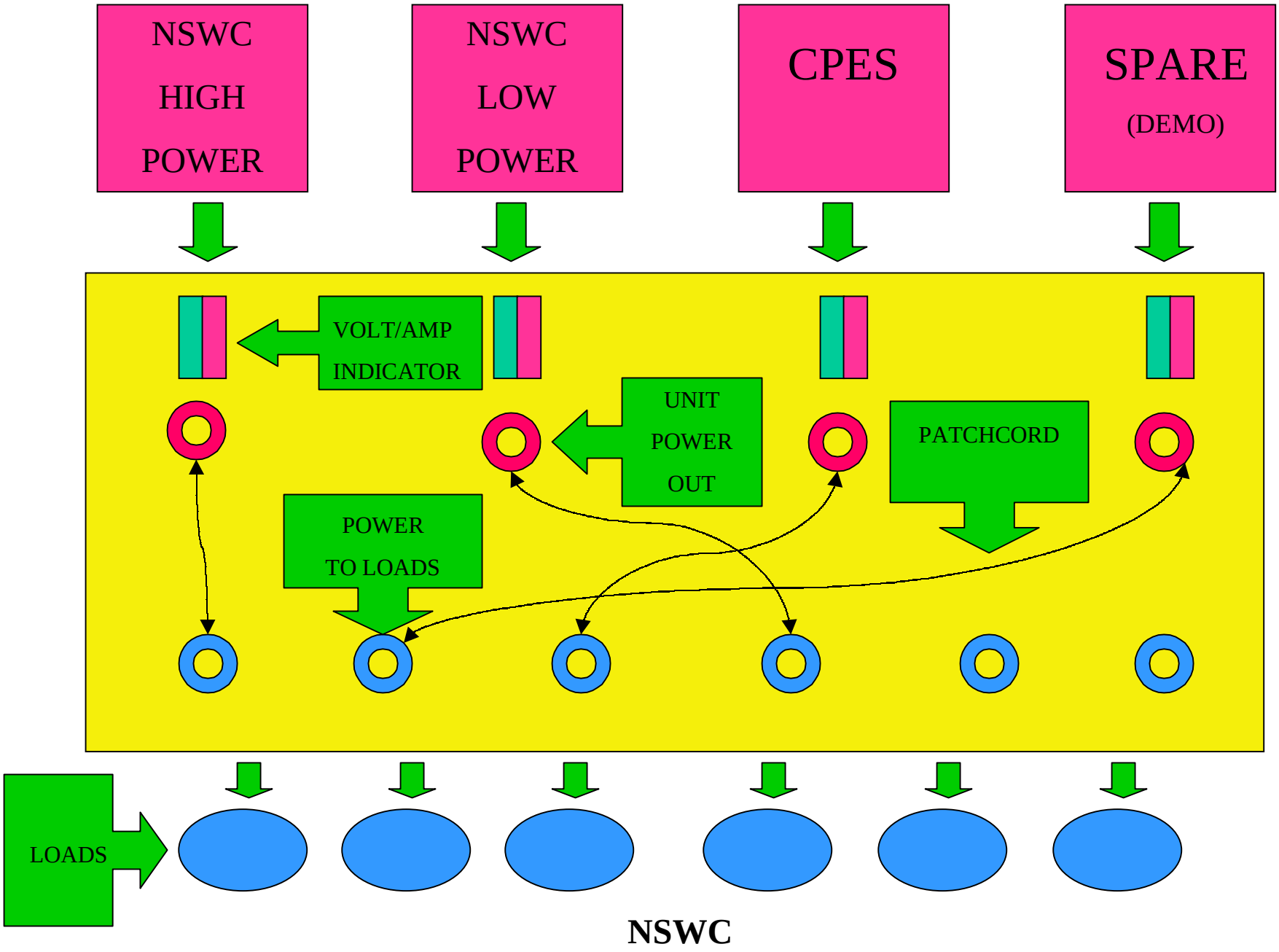
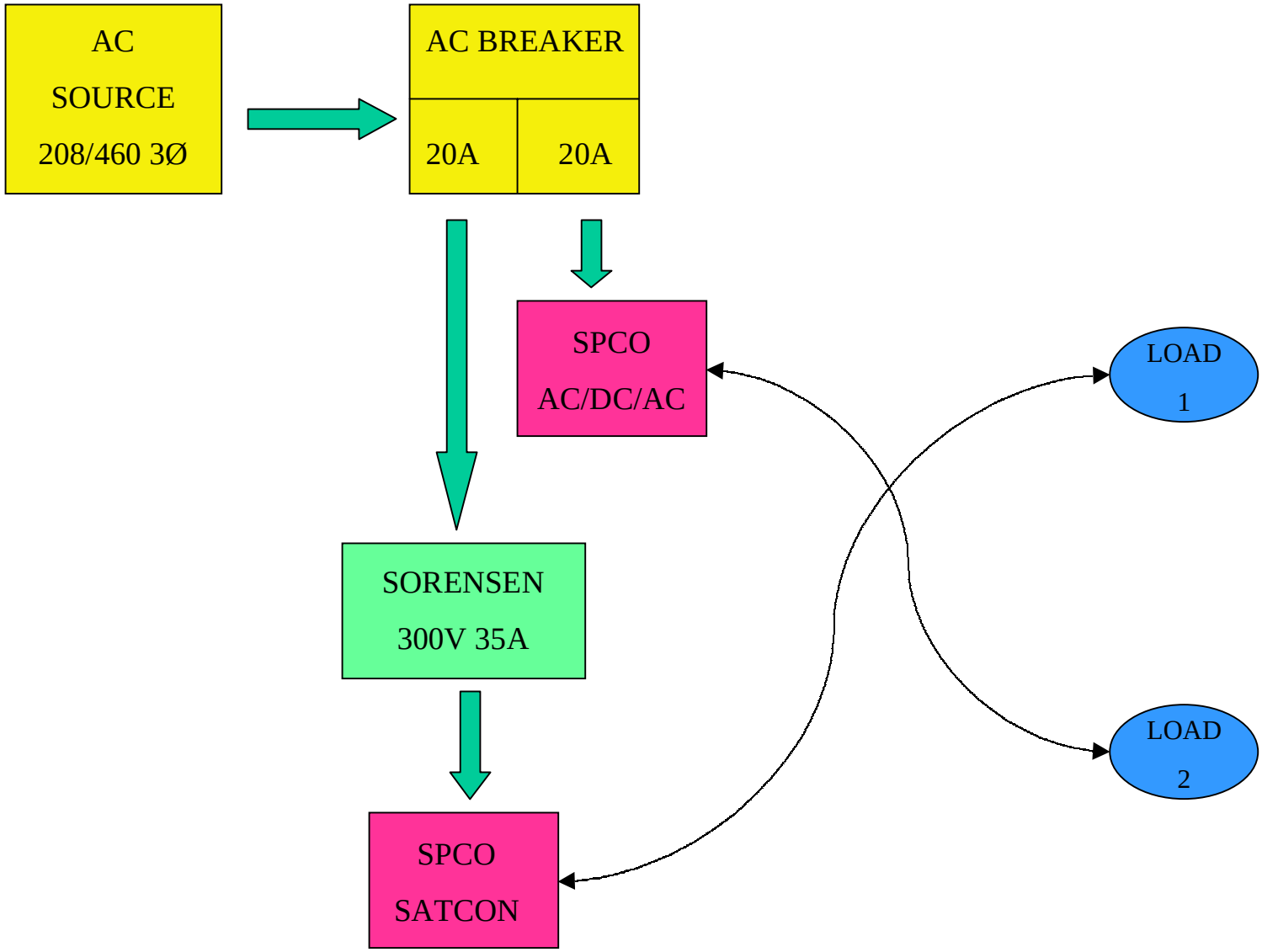
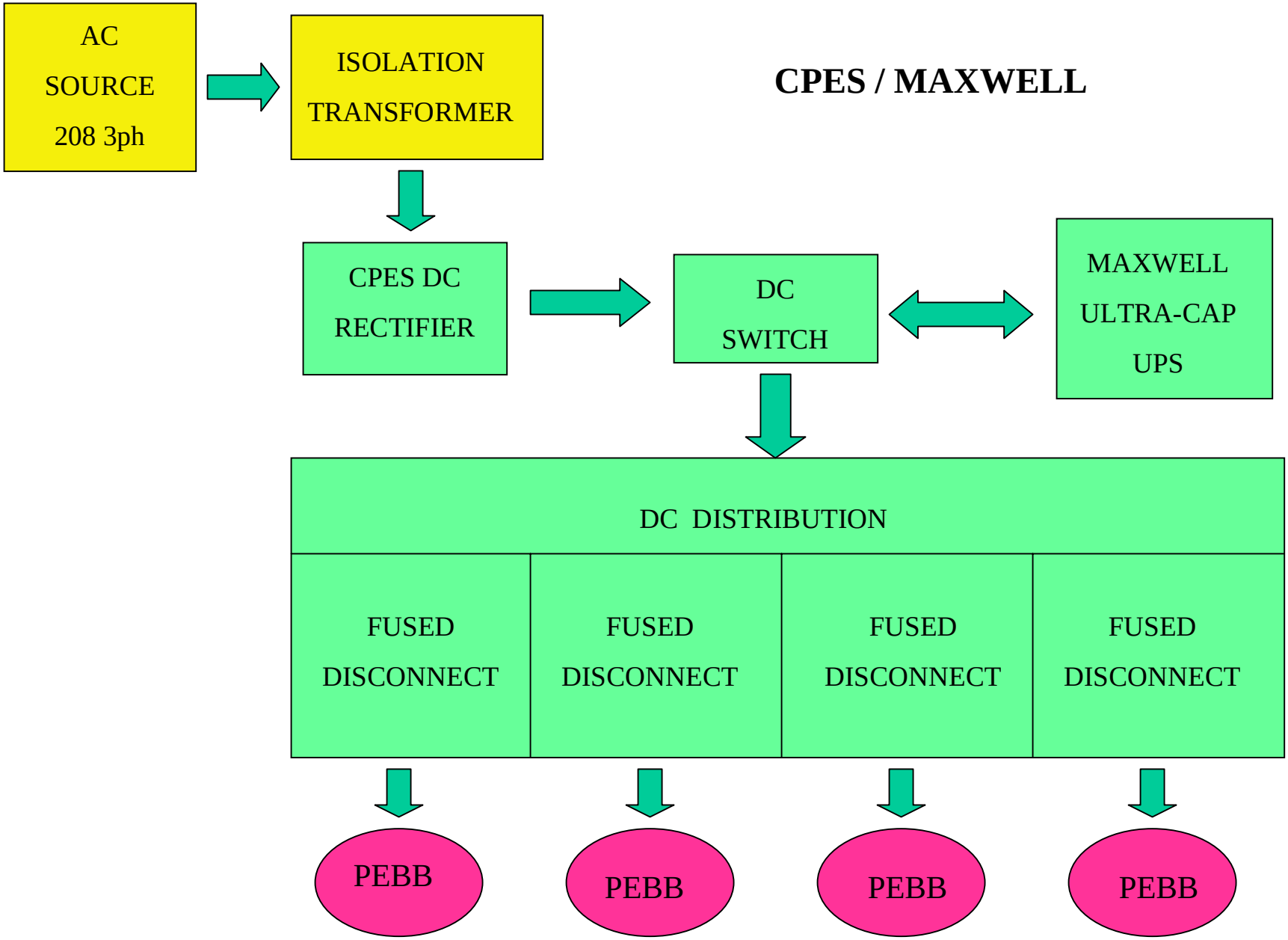

AC SOURCE 208/460 3ph
ISOLATION TRANSFORMER
CPES DC RECTIFIER
DC CONTACTOR
MAXWELL ULTRA-CAP UPS
DC DISTRIBUTION
NSWC HIGH POWER
NSWC LOW POWER
CPES
SPARE (DEMO)
AC BREAKER
SPCO AC/DC/AC
LOAD 1
LOAD SELECTION PANEL
SORENSEN 300V 35A
SPCO SATCON
LOAD 2
LOAD 3
LOAD 4
LOAD 5
LOAD 6


NSWC
HIGH
POWER
NSWC
LOW
POWER
CPES
SPARE
(DEMO)
VOLT/AMP
INDICATOR
UNIT
POWER
OUT
PATCHCORD
POWER
TO LOADS
LOADS

NSWC


AC
SOURCE
208/460 3Ø
AC BREAKER
20A
20A
SPCO
AC/DC/AC
LOAD
1
SORENSEN
300V 35A
LOAD
2
SPCO
SATCON

SPCO


AC
SOURCE
208 3ph
ISOLATION
TRANSFORMER
CPES / MAXWELL
CPES DC
RECTIFIER
DC
SWITCH
MAXWELL
ULTRA-CAP
UPS
DC DISTRIBUTION
FUSED
DISCONNECT
FUSED
DISCONNECT
FUSED
DISCONNECT
FUSED
DISCONNECT
PEBB
PEBB
PEBB
PEBB

NOTES

- Each input to the NSWC load selection panel will be fused inside the panel.
- Require DC control section so that each Pebb can be switched off individually and has some current protection.
- AC source voltage for NSWC/CPES booth is 2 - 30 A 110 circuits with 6 outlets each and 3 Ø 480V at 100 A
- The linear motor will be run only from it's position with the NSWC unit. Any other unit capable of running the linear motor will be provided appropriate connection. Wye configuration with neutral is required.
- Connection for all other loads will be by standard 3Ø 250V 30A 4 wire connectors.
- Patch panel cords will be male/female 3Ø 250V 30A connectors.
- SPCO will coordinate with PCIM show staff for booth power to suit their needs.
- Loads :
  - Ball valve will remain with the SPCO display
  - Linear motor will remain with the NSWC display
  - Butterfly valve
  - Pump loop
  - 400hz motor
  - DC motor

  } These loads will be mobile.

Additional suitable loads can be easily integrated into the system….

Light bank ?

QUESTIONS ON DC DISTRIBUTION

- NSWC feels the need to provide a means to isolate each PEBB from the DC source. Something at least one step more sophisticated than jerking out a plug is desired. Will NSWC / Vector be procuring parts and building this link or is something suitable available. (Parts available?)
- What current protection is in place within the DC distribution? Is there some means to provide individual protection to each PEBB along with the disconnect?